

Formerly MIL-C-5015 Types A and B

See page 429 for dimension table. MS receptacles mate with MS mating plugs that are on the same line in the table below. *Standard shells have cadmium plating with drab olive chromate finish. In shell sizes 12S, 14S, 16, 16S, 18, 20, 22, 24, and 28, clear chromate over cadmium plating (639), black zinc over zinc plating (621), or electroless nickel plating (689) are also

MS Receptacles

No. of Contacts	Shell Size and Insert	97-3100A*		97-3101A*		97-3102A*	
		EACH		EACH		EACH	
		1-9	10-49	1-9	10-49	1-9	10-49
7	24-10S	45.02	30.87	45.15	30.98	33.09	27.08
9	24-11P	25.21	21.01	30.21	24.17	18.99	15.54
9	24-11S	31.89	26.57	33.97	28.31	26.41	21.61
5	24-12P	55.14	40.72	55.21	44.16	47.11	36.56
5	24-12S	66.94	50.90	69.03	55.22	61.87	48.00
7	24-16P	43.15	31.86	43.25	34.61	34.34	26.64
7	24-16S	59.95	40.52	52.42	41.93	37.41	31.18
12	24-19P	34.52	28.76	34.56	28.80	35.44	24.40
12	24-19S	54.94	37.59	55.03	37.64	33.12	27.09
11	24-20P	28.62	19.81	28.72	21.59	19.19	13.41
11	24-20S	28.79	19.93	30.07	21.73	19.70	16.12
10	24-21P	41.05	30.32	41.16	32.92	26.00	21.27
10	24-21S	44.98	33.22	45.05	36.05	29.33	24.00
4	24-22P	32.16	22.19	32.20	22.25	20.58	16.84
4	24-22S	33.19	27.66	33.23	27.69	30.17	20.85
7	24-27P	41.85	28.74	25.60	21.34	25.38	17.62
7	24-27S	42.92	29.48	28.49	23.31	21.85	17.48
24	24-28P	26.47	21.66	26.52	21.70	19.63	15.71
24	24-28S	29.47	24.11	29.51	24.15	23.00	18.40
9	28-1P	50.66	37.40	55.42	44.35	43.77	33.97
9	28-1S	70.13	51.79	74.90	59.92	64.53	50.08
14	28-2P	31.22	21.58	34.55	24.96	19.72	16.13
14	28-2S	33.08	22.85	36.37	26.20	24.67	17.16
3	28-3P	45.65	33.73	50.42	40.33	38.43	29.82
3	28-3S	49.74	36.73	54.51	43.61	42.78	33.20
3	28-6P	39.58	29.21	44.35	35.48	31.94	24.77
3	28-6S	44.67	32.98	49.43	39.54	27.95	23.29
12	28-8P	43.38	32.02	48.14	38.51	35.99	27.93
12	28-8S	45.65	33.73	50.42	40.33	38.43	29.82
12	28-9P	56.25	38.46	61.68	42.16	40.78	28.04
12	28-9S	61.33	41.90	66.88	45.66	45.72	31.37
7	28-10P	57.94	42.79	62.72	50.18	51.57	40.01
7	28-10S	75.78	55.95	80.55	64.44	70.56	54.75
22	28-11P	31.58	21.81	28.02	22.92	21.83	17.46
22	28-11S	37.94	26.10	40.72	30.38	26.75	21.88
26	28-12P	32.66	22.51	30.07	25.06	24.33	19.46
26	28-12S	34.66	26.10	39.42	31.54	28.02	22.42
35	28-15P	36.50	25.15	37.72	30.86	25.34	20.73
35	28-15S	35.37	29.48	44.91	33.25	30.44	24.91
20	28-16P	27.30	22.75	31.60	25.85	21.68	17.74
20	28-16S	32.66	24.81	34.25	27.40	26.24	18.82
15	28-17P	53.77	36.34	36.66	30.55	37.59	25.40
15	28-17S	57.60	38.95	39.39	32.83	41.39	27.99
12	28-18P	24.21	20.18	28.56	23.37	18.04	14.76
12	28-18S	32.27	24.56	30.92	25.30	20.79	17.01
10	28-19P	51.45	35.22	46.16	34.62	28.06	22.96
10	28-19S	62.18	42.49	59.38	44.53	47.83	32.35
14	28-20P	31.95	23.91	35.15	25.84	20.99	17.17
14	28-20S	35.26	26.59	38.53	28.27	27.42	19.70
37	28-21P	33.30	27.24	36.22	29.64	27.51	22.01
37	28-21S	37.63	30.79	43.76	35.01	36.97	25.50
2	32-5P	44.38	34.37	47.45	37.50	33.80	25.17
2	32-5S	49.31	35.94	51.88	41.20	38.33	28.66
23	32-6P	35.76	30.25	49.06	40.59	28.49	24.10
23	32-6S	61.74	51.09	67.74	56.06	42.02	35.56
35	32-7P	58.86	48.72	64.86	53.67	50.12	40.10
35	32-7S	68.79	57.32	84.82	70.19	70.09	56.06
30	32-8P	43.39	29.80	46.07	34.02	34.66	23.90
30	32-8S	44.14	30.29	39.35	32.79	35.26	24.29
23	32-13P	40.41	33.46	46.41	38.41	31.71	25.36
23	32-13S	46.52	38.49	52.99	43.86	38.24	30.61
4	32-17P	86.67	71.72	92.65	76.68	58.26	48.55
4	32-17S	96.76	80.06	75.32	62.76	65.69	54.74
52	32-414P	54.26	45.22	73.70	56.70	57.07	40.87
52	32-414S	73.34	61.11	98.67	75.89	65.69	54.74
22	36-1P	64.69	53.54	66.20	54.78	45.23	37.71
22	36-1S	63.60	56.11	66.73	56.46	67.08	55.91
4	36-5P	133.53	110.49	135.06	111.77	111.33	92.79
4	36-5S	163.28	135.13	164.82	136.40	139.90	116.59
6	36-6P	87.96	72.80	89.49	74.06	55.84	47.25
6	36-6S	108.20	89.54	109.75	90.83	87.02	72.51
47	36-7P	49.52	41.90	70.37	58.23	49.26	41.05
47	36-7S	76.22	63.07	77.73	64.32	56.29	46.92
47	36-8P	94.61	78.30	96.14	79.58	73.99	61.66
47	36-8S	103.14	85.36	104.67	86.63	82.18	68.48
31	36-9P	118.33	97.92	112.51	93.11	96.72	80.59
31	36-9S	148.24	122.67	149.77	123.94	125.47	104.56
48	36-10P	53.40	38.90	54.59	41.31	33.68	28.07
48	36-10S	46.31	39.18	48.02	40.02	37.29	31.08
35	36-15P	90.23	61.03	56.22	46.85	63.68	43.03
35	36-15S	99.26	67.12	82.65	61.98	72.78	49.20
52	36-403P	118.37	97.95	119.84	99.17	96.72	80.59
52	36-403S	167.12	138.31	168.63	139.56	143.58	119.65



available. Add the shell finish identification to the end of part number to specify a shell finish other than drab olive. *notes the shell styles that are available with all four of these finish choices. Pricing shown is for standard drab olive and for (639) clear chromate and (621) black zinc finishes. Prices for finish (689) are higher. See page 436 for cable clamps and other accessories.

MS Mating Plugs

Shell Size and Insert	97-3106A*		97-3107A*		97-3106B*		97-3108A*		97-3108B*	
	EACH		EACH		EACH		EACH		EACH	
	1-9	10-49	1-9	10-49	1-9	10-49	1-9	10-49	1-9	10-49
24-10P	39.67	27.26	50.46	37.27	45.57	33.56	63.01	46.53	44.94	31.10
24-11S	34.57	28.28	41.02	34.19	47.30	36.70	66.05	51.24	41.03	32.82
24-11P	27.15	22.22	34.35	28.63	39.48	30.63	58.24	45.19	33.73	26.98
24-12S	71.24	53.42	80.85	59.70	80.88	62.76	99.64	77.32	72.53	58.02
24-12P	45.15	37.62	67.03	49.51	66.17	51.34	84.90	65.88	58.72	46.98
24-16S	53.52	40.13	64.23	47.42	63.15	48.99	81.93	63.56	55.92	44.74
24-16P	36.35	30.29	40.15	33.97	54.81	42.52	73.58	57.09	46.76	37.40
24-19S	41.28	33.77	48.80	40.66	50.90	37.59	68.49	50.57	50.78	35.15
24-19P	52.73	36.12	52.20	38.53	38.01	31.67	64.76	47.83	46.80	32.40
24-20S	29.18	20.19	42.66	31.51	37.66	27.82	55.23	40.78	27.81	22.76
24-20P	28.93	20.01	42.13	31.10	37.12	27.43	54.70	40.39	27.38	22.40
24-21S	37.49	30.67	56.87	41.99	55.34	42.94	74.07	57.48	34.86	29.05
24-21P	41.51	31.13	52.97	39.22	51.15	39.68	69.91	54.24	32.95	27.45
24-22S	35.99	29.45	50.70	37.45	45.94	33.76	63.28	46.73	42.92	31.30
24-22P	28.72	23.50	43.58	32.17	38.67	28.47	56.14	41.47	35.71	26.04
24-27S	31.03	24.83	38.60	31.59	39.92	27.63	43.68	36.40	34.14	25.20
24-27P	42.68	29.30	36.62	30.52	39.87	27.59	54.95	40.58	34.07	25.16
24-28S	32.18	25.74	44.74	33.03	39.97	29.53	57.57	42.52	34.93	27.95
24-28P	28.81	23.05	41.79	30.86	36.77	27.15	54.37	40.14	33.48	24.72
28-1S	74.30	55.72	84.04	61.79	76.08	60.87	102.80	79.75	73.19	60.99
28-1P	41.98	34.35	65.35	48.06	56.66	45.32	82.03	63.64	56.76	45.41
28-2S	30.01	24.55	48.91	36.11	37.63	27.65	57.72	42.63	37.81	27.75
28-2P	27.99	22.90	37.88	31.57	35.48	26.20	55.72	41.16	30.80	25.67
28-3S	52.54	39.42	67.16	49.59	55.70	44.55	81.03	62.86	55.84	44.68
28-3P	48.22	36.16	63.08	46.58	51.63	41.30	76.67	59.49	52.66	38.88
28-6S	47.15	35.35	62.10	45.84	50.64	40.51	75.63	58.69	50.78	40.63
28-6P	41.43	31.07	56.98	42.08	45.55	36.42	69.91	54.24	45.67	36.56
28-8S	48.22	36.16	63.08	46.58	51.63	41.30	76.67	59.49	51.74	41.40
28-8P	45.78	34.34	60.80	44.90	49.33	39.47	74.26	57.60	49.49	39.60
28-9S	63.31	43.27	70.19	51.84	58.74	43.38	79.01	58.36	56.53	43.49
28-9P	58.43	39.94	59.15	43.68	47.70	35.24	67.98	50.20	47.86	35.33
28-10S	80.33	60.25	93.20	68.82	81.74	65.39	108.67	84.31	81.89	65.52
28-10P	61.33	46.00	75.37	55.65	63.94	51.15	89.79	69.67	64.07	51.24
28-11S	35.22	28.82	54.03	39.91	42.60	31.46	48.84	40.70	42.73	31.55
28-11P	31.36	25.09	41.96	34.33	36.60	27.03	43.64	36.36	36.72	27.12
28-12S	37.56	30.05	47.46	38.83	37.83	30.95	62.86	46.43	42.73	31.55
28-12P	32.31	25.85	42.82	35.03	32.44	26.54	57.82	42.70	31.31	25.93
28-15S	38.92	31.84	45.35	37.94	46.22	34.14	66.47	49.09	46.35	34.22
28-15P	33.82	27.67	52.64	38.87	41.18	30.41	61.42	45.36	36.50	30.41
28-16S	33.21	27.17	49.68	36.23	35.22	26.01	57.90	42.75	33.25	27.01
28-16P	33.53	25.41	48.79	36.05	37.37	27.59	57.62	42.55	37.50	27.70
28-17S	40.44	33.09	63.96	47.23	52.50	38.78	72.78	53.75	52.66	38.88
28-17P	37.42	30.62	60.43	33.16	48.97	36.16	69.25	51.13	49.10	36.25
28-18S	29.26	23.94	39.03	32.52	30.25	25.21	56.98	42.08	37.17	27.23
28-18P	26.52	21.70	36.56	30.46	34.04	25.14	43.33	36.11	34.63	25.25
28-19S	64.53	44.09	71.75	52.98	44.19	35.82	80.57	59.50	60.21	44.47
28-19P	53.98	36.97	59.36	43.84	36.78	30.65	68.18	50.35	48.02	35.47
28-20S	32.59	26.67	51.41	37.96	39.95	29.52	60.23	44.48	40.11	29.61
28-20P	29.47	24.11	48.40	35.73	36.95	27.28	57.22	42.25	37.08	27.37
28-21S	43.65	32.25	58.19	42.97	46.76	34.52	56.19	45.97	46.87	34.62
28-21P	37.03	29.62	53.54	39.53	42.08	31.07	59.83	44.18	52.00	43.03
32-5S	57.37	40.71	—	—	60.86	44.95	—	—	56.12	46.76
32-5P	56.90	—	—	—	59.97	44.76	—	—	51.72	42.65
32-6S	56.20	54.55	—	—	67.66	46.92	—	—	70.70	58.50
32-6P	47.53	39.61	—	—	49.58	33.53	—	—	52.00	43.03
32-7S	81.84	68.20	—	—	113.75	76.91	—	—	87.76	72.63
32-7P	57.04	47.53	—	—	92.63	62.64	—	—	67.82	56.12
32-8S	50.58	37.96	—	—	52.17	38.02	—	—	53.08	36.74
32-8P	42.35	35.46	—	—	51.48	38.53	—	—	52.34	36.19
32-9S	42.77	35.63	—	—	51.32	36.92	—	—	55.94	36.94
32-13P	45.00	37.51	—	—	48.86	33.02	—	—	49.36	40.84
32-17S	78.99	65.82	—	—	119.48	80.77	—	—	105.72	87.50
32-17P	71.56	59.64	—	—	110.40	74.63	—	—	95.62	79.13
32-414S	79.01	65.84	—	—	95.72	79.85	—	—	83.01	69.17
32-414P	59.91	49.93	—	—	73.96	60.06	—	—	62.06	51.71
36-1S	84.84	70.71	—	—	114.28	77.24	—	—	98.81	81.76
36-1P	52.06	44.05	—	—	93.81	63.42	—	—	76.04	62.95
36-5S	136.67	131.38	—	—	181.64	122.81	—	—	161.21	130.99
36-5P	157.44	107.57	—	—	155.64	105.22	—	—	133.76	108.67
36-6S	109.14	87.31	—	—	109.86	72.02	—	—	110.37	89.68
36-6P	68.66	58.09	—	—	88.80	60.43	—	—	91.70	74.51
36-7S	77.14	61.71	—	—	78.37	52.99	—	—	80.84	65.68
36-7P	69.77	55.83	—	—	71.64	48.46	—	—	74.02	60.14
36-8S	82.55	69.85	—	—	128.64	86.96	—	—	105.54	85.74
36-8P	78.80	64.13	—	—	120.95	81.77	—	—	97.84	79.48
36-9S	149.18	119.34	—	—	168.55	113.96	—	—	147.34	119.72
36-9P	119.25	95.40	—	—	141.61	95.75	—	—	119.70	97.25
36-10S	62.78	42.90	—	—	66.13	48.94	—	—	66.76	54.80
36-10P	48.29	40.24	—	—	49.16	40.47	—	—	62.69	51.62
36-15S	106.19	72.23	—	—	83.73	61.82	—	—	91.79	68.84
36-15P	97.75	66.53	—	—	75.47	55.73	—	—	66.10	55.08
36-403S	161.33	134.44	—	—	134.08	113.46	—	—	155.76	133.85
36-403P	114.47	95.40	—	—	95.36	80.69	—	—	113.17	97.25